

IN THE CLAIMS

Claims 1-22 (canceled)

Claim 23 (currently amended): An apparatus comprising:

a casing defining a cavity having a top, a bottom, and front and rear ends, and configured to conduct a liquid from the front end toward the rear end;

a coalescer, in the cavity, comprising an inclined stack of corrugated plates that extend rearward and upward and have corrugations extending rearward and upward, and configured for the liquid to flow between the plates in a direction parallel with the corrugations; and

~~The apparatus of claim 21 further comprising an upper baffle extending from a front end of the coalescer upward to the top of the cavity, configured to block the mixture liquid from bypassing the coalescer by flowing rearwardly over the coalescer.~~

Claim 24 (currently amended): ~~The apparatus of claim 23 wherein the upper baffle has further comprising a bypass flow opening passage in the cavity through which the liquid can bypass the coalescer when the liquid is above a predetermined level.~~

Claim 25 (currently amended): An apparatus comprising:

a casing defining a cavity having a top, a bottom, and front and rear ends, and configured to conduct a liquid from the front end toward the rear end;

a coalescer, in the cavity, comprising an inclined stack of corrugated plates that extend rearward and upward and have corrugations extending rearward and upward, and configured for the liquid to flow between the plates in a direction parallel with the corrugations; and

~~The apparatus of claim 21 further comprising a lower baffle extending from a rear end of the coalescer downward to the bottom of the cavity, configured to block any of the mixture liquid that is under the coalescer from flowing rearwardly onward to the rear end of the cavity without first flowing through the coalescer.~~

Claim 26 (canceled)

Claim 27 (currently amended): An apparatus comprising:

a casing defining a cavity having a top, a bottom, and front and rear ends, and configured to conduct a liquid from the front end toward the rear end;

a coalescer, in the cavity, comprising an inclined stack of corrugated plates that extend rearward and upward and have corrugations extending rearward and upward, and configured for the liquid to flow between the plates in a direction parallel with the corrugations; and

~~The apparatus of claim 21 further comprising an outlet tube at the rear end of the cavity through which the liquid can exit the cavity, the outlet tube defining a horizontal outlet channel with a bottom that is above the top of the coalescer.~~

Claim 28 (previously presented): The apparatus of claim 27 further comprising a weir extending upward from the bottom of the cavity and located between the coalescer and the front end, the weir having fluid flow apertures below the channel bottom and a horizontal top edge above the channel bottom.

Claim 29 (new): The apparatus of claim 23 further comprising a lower baffle extending from a rear end of the coalescer to the bottom of the cavity, configured to block any of the liquid that is under the coalescer from flowing rearwardly onward to the rear end of the cavity without first flowing through the coalescer.

Claim 30 (new): An apparatus comprising:

a casing defining a cavity having a top, a bottom, and front and rear ends, and configured to conduct a liquid through the cavity from the front end toward the rear end;

a coalescer, in the cavity, comprising a stack of corrugated plates that have parallel corrugations, and configured for the liquid to flow between the plates in a direction parallel to the corrugations; and

an outlet tube at the rear end of the cavity through which the liquid can exit the cavity, the outlet tube defining a horizontal outlet channel that is above the plates.

Claim 31 (new): The apparatus of claim 30 further comprising a weir extending upward from the bottom of the cavity and located between the coalescer and the front end, the weir having fluid flow apertures below a bottom of the outlet channel and a horizontal top edge above the bottom of the outlet channel.

Claim 32 (new): An apparatus comprising:

a casing defining a cavity having a top, a bottom, and front and rear ends, and configured to conduct a liquid through the cavity from the front end toward the rear end; and

a coalescer, in the cavity, comprising a stack of corrugated plates that have parallel corrugations, and configured for the liquid to flow between the plates, in a direction parallel with the corrugations, along the full lengths of the corrugations.

Claim 33 (new): The apparatus of claim 32 wherein the plates extend from a first end of the stack to an opposite second end of the stack, and the coalescer is further configured for the liquid to flow between the plates parallel to the corrugations from the first end to the second end.

Claim 34 (new): The apparatus of claim 32 further comprising a blocking structure that constrains a flow of the liquid conducted by the casing from the front end of the cavity to the rear end of the cavity to extend through the coalescer.

Claim 35 (new): The apparatus of claim 34 further comprising a bypass flow passage in the cavity through which the flow can bypass the coalescer when the liquid is above a predetermined level.

Claim 36 (new): The apparatus of claim 32 further comprising an outlet tube at the rear end of the cavity through which the liquid can exit the cavity, the outlet tube defining a horizontal outlet channel with a bottom that is above the top of the coalescer.

Claim 37 (new): The apparatus of claim 32 configured to enable contaminants in the liquid, that have been agglomerated by the plates and have settled to the bottom of the cavity, to be removed from the cavity.

Claim 38 (new): The apparatus of claim 32 configured to enable contaminants in the liquid, that have been agglomerated by the plates and have risen to a top of the liquid, to be removed from the cavity.

Claim 39 (new): The apparatus of claim 32 wherein the plates extend upward, and the corrugations extend upward.

Claim 40 (new): The apparatus of claim 39 wherein the plates are inclined so as to extend rearward and upward, and the corrugations extend rearward and upward.

Claim 41 (new): An apparatus comprising:

a casing defining a cavity having a top, a bottom, and front and rear ends, and configured to conduct a liquid through the cavity from the front end toward the rear end; and

a coalescer, in the cavity, comprising a stack of corrugated plates that extend upward from a bottom of the stack and have corrugations extending upward, and configured for the liquid to enter the coalescer by flowing upwardly through the bottom of the stack and to flow upwardly between the plates in a direction parallel with the corrugations.

Claim 42 (new): The apparatus of claim 41 wherein the plates are inclined so as to extend rearward and upward, and the corrugations extend rearward and upward.

Claim 43 (new): The apparatus of claim 41 further comprising a blocking structure that constrains a flow of the liquid conducted by the casing from the front end of the cavity to the rear end of the cavity to extend through the coalescer.

Claim 44 (new): An apparatus comprising:

a casing defining a cavity having a top, a bottom, and front and rear ends, and configured to conduct a liquid through the cavity from the front end toward the rear end; and

a coalescer, in the cavity, comprising a stack of corrugated plates that extend upward and have corrugations extending upward, and configured for the liquid to flow upwardly between the plates in a direction parallel with the corrugations and to exit the stack by flowing upwardly through a top of the stack.

Claim 45 (new): The apparatus of claim 44 wherein the plates are inclined so as to extend rearward and upward, and the corrugations extend rearward and upward.

Claim 46 (new): The apparatus of claim 44 further comprising a blocking structure that constrains a flow of the liquid conducted by the casing from the front end of the cavity to the rear end of the cavity to extend through the coalescer.